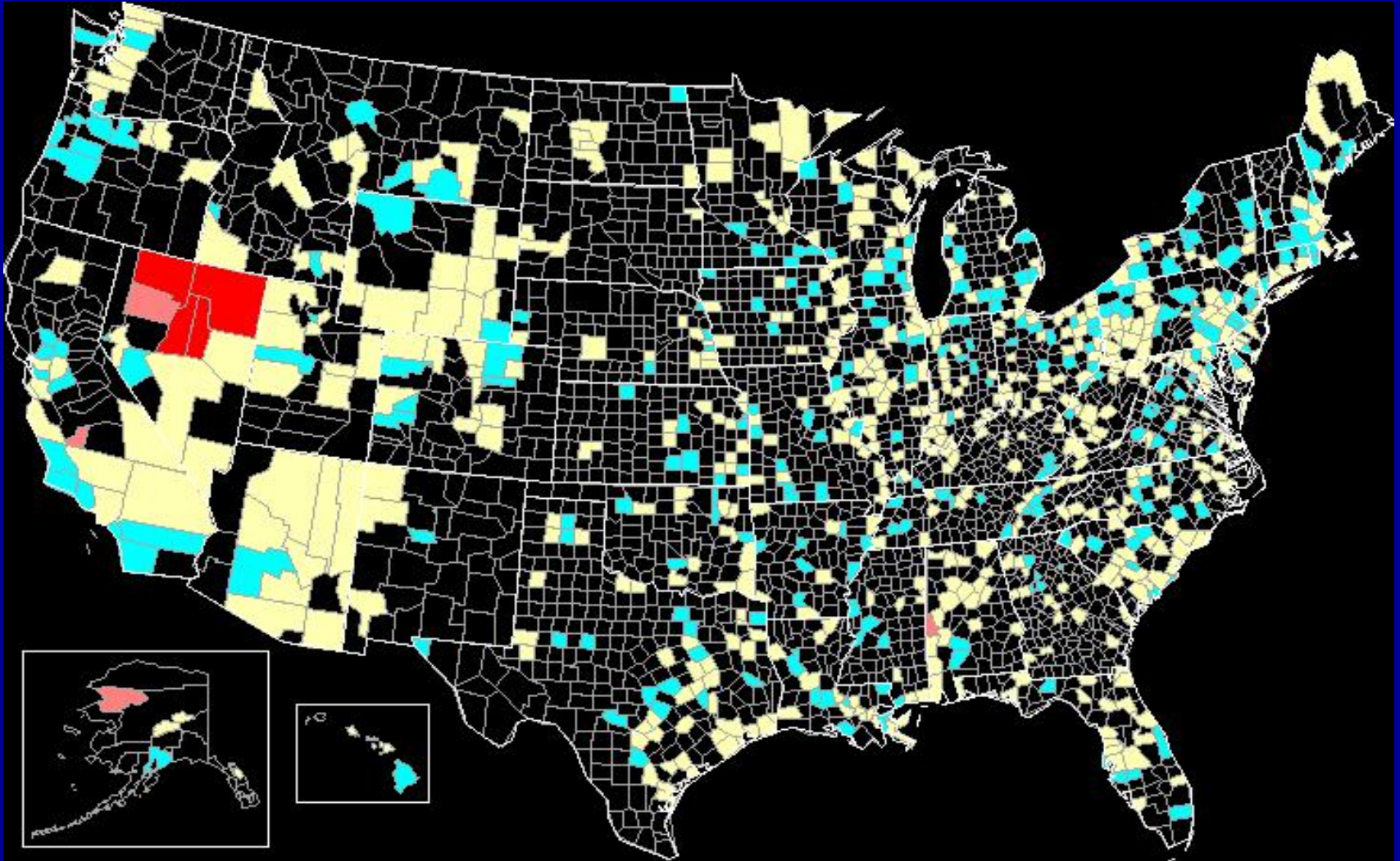


A Review of Nevada's Regulation of Mercury Emissions from Mining Operations

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NORTHERN NEVADA TOP MERCURY HOT SPOT

MAP: Source: www.epa.gov/tri. Map shows total onsite mercury emissions by county. 99% of all counties reporting mercury releases reported fewer mercury emissions than the dark red and pink counties. The middle 66% of all counties reporting mercury emissions are colored yellow. The lowest 33% are blue.

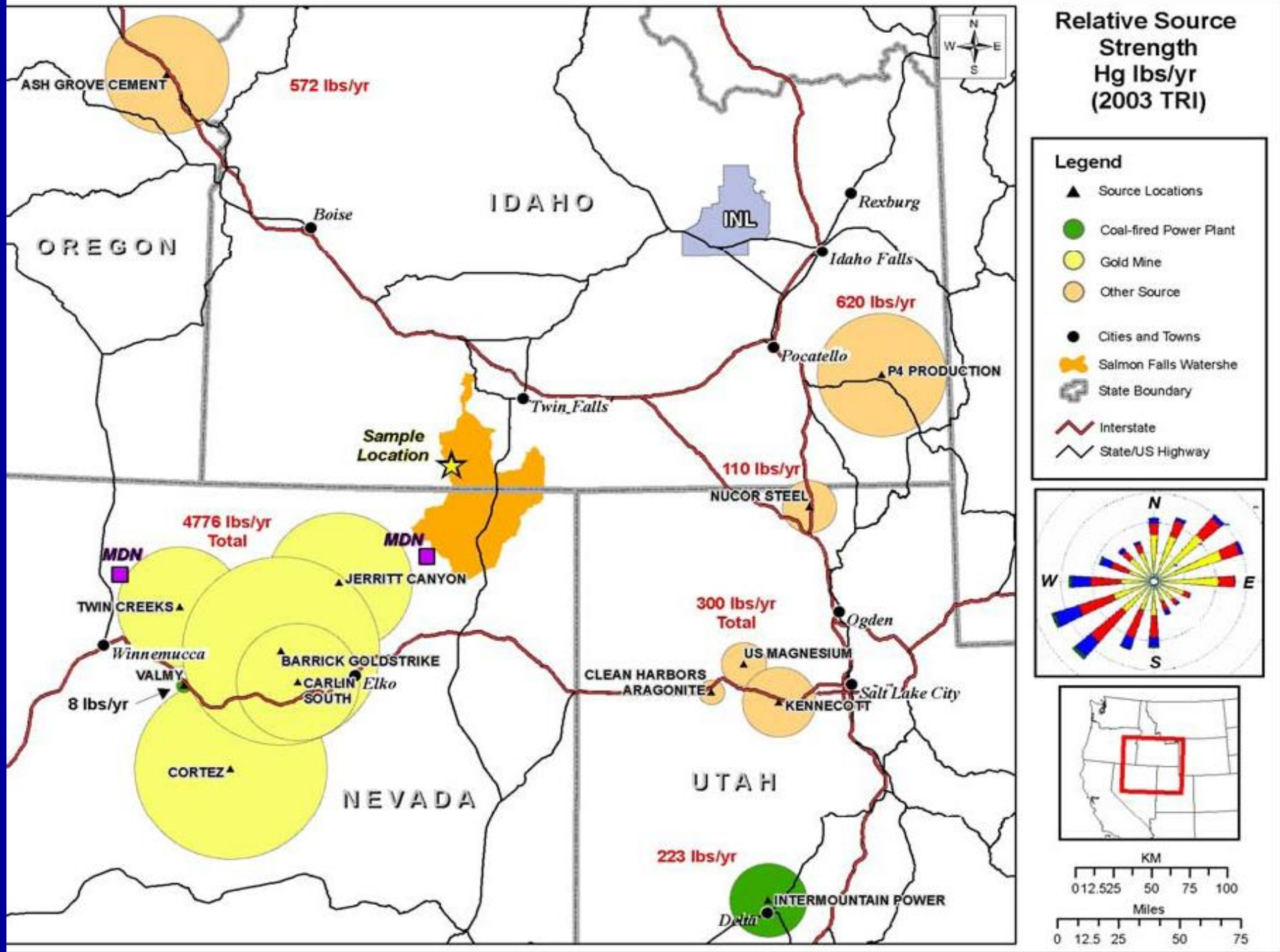


TRI Reported Disposed of or Otherwise Released (in pounds) By Industry Nevada, 2004. www.epa.gov/tri.

Industry	On-site Fugitive Air	On-site Point Source Air	On-site Surface Water Discharges
Stone/Clay/Glass	0	30.5	.
No Reported Codes	0	0	.
Metal Mining	112.831	4604.5	0.3
Electric Utilities	1	168.9	.
Solvent Recovery	0.09	0.23	.
Total	113.921	4804.13	0.3
% total	99.0431966	95.844617	100



Nevada's gold roasters can produce up to 10 times the amount of mercury emissions to air as an average coal-fired power plant. The emissions are likely falling out in north central Nevada, Utah, Idaho, and other downwind areas.



Source: EPA Presentation

Under Reporting of Emissions

- Glamis Gold's Marigold: reported zero emissions in 2004 TRI, yet 171 lbs to NDEP. We believe similar emissions in earlier years.
- Newmont's Lone Tree: reported zero or 1 lb to TRI from 1998 to 2004. To NDEP they listed "unknown" releases from at least 3 sources.
- Coeur Rochester: 5 lbs reported to TRI, yet over 31,000 lbs byproduct produced. Not a reasonable control rate (over 99.99%). In addition, they report high levels in the air and in worker urine tests.

Coeur Rochester

- Airborne Mercury: February 2006
130,170, & 200 $\mu\text{g Hg/M}^3$ in retort area
 - Urine Mercury:
March 2005: 106-109 $\mu\text{g Hg/gm Creatine}$;
Spot for three employees/retort area
March 2005 60-90 $\mu\text{g Hg/gm Creatine}$;
24-hour for three employees/retort area
- (provided by DBI-mine safety and training to Nevada Dept. of Labor)

Comments on Nevada Mercury Air Emissions Control Program

- The Proposed Program is Not Linked to the Protection of Public Health and the Environment. There is no end goal of mercury emissions set “to achieve and maintain levels of air quality which will protect human health and safety, prevent injury to plant and animal life”.

Comments on Nevada Mercury Air Emissions Control Program

- Economic costs to the operator are considered, yet health costs to workers and public are not.

NDEP has the discretion to weaken the MACT standard based on company costs, adverse impacts on other pollution rates, and energy requirements. NDEP does not have the authority to strengthen the NvMACT standard, if needed, to protect human health and the environment.

Comments on Nevada Mercury Air Emissions Control Program

- Monitoring is only required once per year, and is not independently conducted. Such a program has no statistical validity, ignores the significant variabilities in mercury content of ores within a mine, and may miss significant “upset” periods.
- Fugitive emissions are not considered, despite significant evidence of large emissions from heap leach pads and other non-point sources.

Comments on Nevada Mercury Air Emissions Control Program

- There is almost no ambient monitoring in areas surrounding the mines, neighboring communities, or in workplaces.
- There is no mass balance accounting to determine overall emissions. The Coeur Rochester example shows the need for such an approach.

Comments on Nevada Mercury Air Emissions Control Program

- There is no overall reduction goal or ratcheting down of emissions through time.
- Existing control technology is de-facto considered Nevada Maximum Achievable Control Technology (NvMACT).

Conclusions

- Without proper monitoring we will never truly know the extent of the problem, nor the level of control achieved.
- Emission limits, based upon worker, public and ecological health, should be worked towards.

If we don't know where we are,
and we don't know where we are headed,
how will we know when we get there.